

Chapter 5

MAJOR DESIGN ISSUES

I. Introduction

Before a value-added tax could be implemented, a number of basic decisions must be made about the structure of the tax. The most important issues, to be considered in this chapter, include: the distinction between zero rating and exemption; the alternatives for reducing the absolute burden on the poor and regressivity; the choice between single or multiple rates of tax; and the tax treatment of exports and imports. Nearly two decades of European experience with the value-added tax have shown these to be the most important design issues. These issues are discussed in the context of a consumption value-added tax extending through the retail level with tax liability determined under the credit method. Other issues, such as the treatment of small businesses, are considered in Chapter 6.

II. Zero Rating versus Exemption

Under a value-added tax, commodities, transactions, or firms can receive preferential treatment in two different ways, by zero rating or exemption. Under zero rating, all value-added tax is removed from the zero rated good, activity, or firm. In contrast, exemption only removes the value-added tax at the exempt stage, and it will actually increase, rather than reduce, the total taxes paid by the exempt firm's business or non-retail customers. It is for this reason that a sharp distinction must be made between zero rating and exemption in designing a value-added tax.

A. Commodities

If a commodity or service is zero rated, no tax applies to its sale and the seller of the zero-rated item receives a credit for the tax paid on the purchase of materials and other inputs used to produce it. By this procedure, the zero-rated commodity is freed of all value-added tax; the user bears no tax with respect to a zero-rated good or service. By contrast, if a commodity is exempted, the sale is not subject to tax, but the seller receives no credit for tax paid on the purchase of materials and other inputs used to produce the exempt item. Users of the exempt item will thus bear some tax.

If a commodity, for example, is exempt only at the retail level, then only the retail level is freed of value-added tax. Although the retailer would not charge value-added tax on its sale, the retailer would not be entitled to a credit for tax paid on the purchase of an exempt item. Thus, exemption of a commodity through all of its production and distribution channels would be necessary to free it of its

entire value-added tax burden. But, with zero rating, unlike exemption, only the final sale of the commodity needs to be zero rated, since any tax previously paid would be credited on the last sale.

B. Transactions

If a particular type of transaction, for example exports, is zero rated, the seller (the exporter) would not be subject to tax and would receive a credit for tax paid on the purchase of the goods and other purchased inputs. This procedure frees the zero-rated transaction of all value-added tax. If the transaction is exempted, rather than zero-rated, the sale itself would not be subject to value-added tax, but the exporter would not receive a credit for tax paid on the purchase of the exported good or other inputs used in its production.

C. Firms

Particular sets of firms, as distinct from commodities or transactions, may be either zero rated or exempted. If banks, for example, are zero rated, they would be registered and would be required to file value-added tax returns, but there would be no tax on the banking and financial services they provide. The banks would receive a credit (and file returns to obtain the refund) for tax paid on purchases of materials, equipment, and other inputs. If banks, however, are exempted, the value added by their activities would not be subject to value-added tax, but they would receive no credit for tax paid on their purchases. Exempt firms would not be registered and would not be required to file value-added tax returns. The difference between zero-rating and exemption can also be illustrated in the case of urban transit service. If urban transit service is zero rated, no tax would be charged on the transit service fares, and the transit system would receive credit (or refund) for the value-added tax paid on its purchases of equipment, motor fuel, supplies, electricity, and any other business-use items. But if transit service is exempt, the system providing the service would not apply tax on the fares received and it would not receive a credit or refund for tax paid on its various purchases.

In summary, firms that are zero rated, that are engaged in zero-rated transactions, or that sell zero-rated goods, are "in the system"; they must be registered to obtain credits or refunds for the value-added tax paid on their purchases. Exempt firms and those selling solely exempt goods or engaging in only exempt transactions are not registered and are not required to file a value-added tax return; they are "outside the system". Firms making both exempt and taxable (or zero-rated sales), or engaged in both exempt and taxable (or zero-rated) transactions, must be registered, but they receive credit only for the value-added tax paid on materials and other inputs used in the production of taxable or zero-rated goods.

D. Consequences of Zero Rating or Exemption

In the case of an exempt firm selling to a final consumer, exemption, compared to full taxation, provides a clear benefit in the form of reduced taxation. This is because the value added by the exempt firm is not taxed and the ultimate consumer pays only the value-added tax incurred by the exempt firm on its purchases from other firms. If the exempt firm, however, sells to a registered taxpayer, exemption can result in more taxation than would prevail under full taxation of the exempt firm's sales. This is because the registered firm will be bearing the tax incurred by the exempt firm on the purchases made by the exempt firm. But when the registered firm, in turn, sells to a final consumer, no credit will be allowed for the taxes paid on the purchases by the exempt firm. In effect, those purchases will be taxed a second time, thereby taxing the final sale more heavily than it would be taxed under full value-added taxation.

As an illustration, consider the situation when tax relief to farmers takes the form of exemption rather than zero rating. Value-added tax would apply to the sales of fertilizer, supplies, tools, and other items to the farmers, but the farmers would not receive a credit for this tax. Thus, it would be borne by firms purchasing from the farm sector. When these firms sell goods with agricultural content, they would pay tax on the value added both by themselves and by the exempt farmers, but with no credit for tax paid on farm inputs; the apparent relief provided by the exemption for farmers is converted into an additional element of tax on farm products. Zero rating of farmers would avoid this problem, but this would require all farmers to be registered for value-added tax purposes. The avoidance of this registration requirement is one reason for exempting farmers. The same type of problem would arise if small firms are exempt and make sales to registered firms.

The choice between zero rating and exemption should be made on the basis of two principal considerations: (1) Is it desirable to free the users of the good or service completely from value-added tax, or only partially? (2) Is it desirable to exclude certain firms from the requirement to register and file returns? Even from the standpoint of the firms themselves, there are conflicting considerations. Zero rating frees a firm and its customers completely from value-added tax, but the zero-rated firm must register and file a tax return. If a firm is exempt, it is not required to register and file a return, but the customers of an exempt firm bear the tax incurred by the exempt firm on its purchases. This may be particularly objectionable to the exempt firm's business customers who cannot receive credit for this tax. In this instance, exemption would place the exempt firm at a competitive disadvantage.

One further advantage of zero rating is that it avoids the complications that would arise if a firm handles both taxable and exempt commodities. With zero rating, such a firm receives credit for tax paid on all its purchases, whether for production or distribution of zero rated or of taxable goods. But if some goods are exempted, then

the firm selling the exempt items is entitled to a credit only for the tax on those purchases of materials and other inputs that are used to produce taxable (or zero-rated) goods. It does not receive a credit for tax paid on purchases related to the exempt transactions.

Handling both exempt and taxable (or zero-rated) goods involves major compliance and administrative problems. The task of keeping the various purchases segregated according to whether they are used for taxable or exempt products is a difficult one. Capital goods, for example, may be used for the production or handling of both taxable and exempt goods; allocation of the tax paid on the purchases of these capital goods would be troublesome, particularly since the relative use in the production of the taxable and exempt goods would not be known in the period in which the capital goods were purchased and the tax credit would be available.

Thus, in general, zero rating is superior to exemption of commodities and services and of transactions, such as exports. Exemption is desirable only for those firms which the government does not wish to register, for administrative or other reasons, and/or does not seek to remove all the value-added tax from their customers. Farmers, small service establishments, sidewalk vendors, and charitable and religious organizations are possible examples of firms for whom exemption may be appropriate.

E. Tax Credit versus Subtraction Method

If, instead of the credit method, the subtraction method were used for determining a firm's tax liability, there would be no zero rating and exemption would apply only to the particular level of activity that is being exempted. Thus, to eliminate the value-added tax on food, it would be necessary to exempt the sale of food by all firms, manufacturers, wholesale distributors, and retailers. With the tax credit method, the final sale is the crucial one; application of a zero rate would remove all cumulated tax from food, making it unnecessary to exclude sales at earlier stages. With the subtraction method, it would not be possible to totally eliminate the value-added tax on food simply by not taxing the final sale; exemption of the final sale would not eliminate the value-added tax that had been paid prior to the retail sale. Eliminating all of the value-added tax on food would require the exemption of all pre-retail transactions. But exempting fertilizer, for example, would also have the unintended result of eliminating some of the value-added tax on sales of non-food items such as fibers.

The subtraction method avoids the cumulative tax problem of breaking a link in the tax and credit chain. Such breaks, however, may be rare with the tax credit method because exempt firms are placed at a disadvantage in selling to registered firms since those firms would then not be able to take credit for tax entering into the prices of their purchases. With the subtraction method, however, exemption would clearly be desirable and thus the political pressure to obtain exemption would be great.

III. The Issue of Regressivity

The most frequent objection to a value-added tax, or any form of general sales tax, is that it would be unfair to lower income individuals and families. There are two aspects to this equity argument: the absolute burden of the tax on the lowest income groups, and the regressivity of the tax or the relatively higher burden of tax as a percentage of income at the lower income levels than at the higher. If the value-added tax applies at a uniform rate to all consumer purchases, a substantial amount of tax would be borne by persons below the poverty levels. The tax would be regressive because the percentage of income used for consumption purposes declines, on the average, as income increases. Of these two equity issues, the absolute burden on the poor is the more serious, since the regressivity of the value-added tax can be offset, if necessary, by adjusting the progressivity of the income tax rates.

Four alternatives exist for reducing the burden of the tax on the lower income individuals and families and to lessening the regressivity of the tax. These are summarized here, and evaluated in Chapter 8.

A. Adjustment of Government Transfer Payments

Some government transfer payments, such as social security, are intended to reflect increases in the price level. Thus, the effect of the value-added tax on prices would be automatically offset by increased payments for those transfers that are indexed to reflect changes in the cost of living. Not all low income individuals and families, however, receive transfer payments; and many with income substantially above the poverty level do receive transfer payments. Therefore, the indexing of transfer payments would not completely alleviate the burden of the tax on low income families and individuals.

B. Zero Rating of Food and Other Necessities

In lieu of indexing transfer payments, it would be possible to remove the tax from certain goods and services. Since food expenditures constitute a higher percentage of income in the lower income levels than in the higher, and since expenditures of lower income groups are heavily concentrated on food purchases, zero rating of food would materially reduce the burden of the tax on the poor, though not eliminate it, and would make the tax less regressive. Twenty-seven of the states exempt food purchases from the retail sales tax and one state applies a reduced rate to food purchases. There are, however, a number of objections to excluding food and other necessities from the value-added tax, including unnecessary revenue losses and compliance and administrative problems; these are considered in Chapter 8.

C. Provision of a Refundable Credit

Another alternative, used by several states, is to provide a credit against the income tax for a dollar amount which represents the value-added tax paid on the consumption of goods and services necessary to maintain a minimum standard of living. The objective is to eliminate the value-added tax from an essential or necessary level of consumption. If the available credit exceeded one's income tax liability, it would be refunded in cash, as is done now with the earned income tax credit. While this system would avoid many of the objections to zero rating of food and other necessities, as well as be less costly, it could be interpreted as a basic change in the country's social welfare program.

D. Personal Exemption Value-Added Tax

The fourth method for addressing the problems of regressivity is the personal exemption value-added tax. Under this approach, workers would be considered to be selling their labor services to their employers. A value-added tax would apply to their wages and would be withheld by the employer. But workers would be exempt from value-added tax on a specified amount of wages, designed to reflect a minimum or poverty level of income. The firm, in calculating its value added for tax purposes, would be allowed to deduct its wage payments, as well as its purchases of raw materials, capital goods, and other items purchased for business use from other firms. If the personal allowance and exemptions were available only with regard to labor income, this alternative would not lessen the burden of the tax on those low income individuals and families not receiving labor income, such as the unemployed.

IV. Single versus Multiple Rates

Apart from exports, which always would be zero rated, a single rate of value-added tax would greatly facilitate compliance with and administration of the tax and would avoid the loss in economic efficiency from changes in consumer buying decisions caused by tax-induced distortions in relative prices. In practice, however, most value-added taxes, in the European Economic Community (EEC) have more than one non-zero rate of tax. Currently, all EEC countries have two or more rates of tax, with Italy having eight separate tax rates. The United Kingdom has 2 rates of tax, 15 percent and zero. In addition to a standard rate, Belgium, France, Ireland, and Italy have one or more "luxury" rates that apply to such commodities as automobiles, jewelry, furs, television sets, and cosmetics. Belgium, Denmark, France, Germany, Ireland, Italy, Luxembourg, and the Netherlands each has a reduced rate which is applied to articles regarded as semi-necessities. Belgium, Denmark, Ireland, Italy, the Netherlands, and the United Kingdom apply a zero rate to basic necessities, such as food and medicine. The objective of the multiple rates is to make the value-added tax less regressive.

There are a number of problems, however, with multiple rate of tax. Though zero rating of food eliminates the value-added tax on food purchases, it does so for everyone regardless of their income. Thus, in light of its basic objective of lessening the burden of the tax on lower income groups, it is very expensive in terms of revenue foregone. With, multiple rates, because firms must apply the correct tax rate to each sale, interpretative questions arise about the appropriate rate class, and audit issues become much more difficult to resolve. This creates difficulties for both taxpayers and tax administrators. The classification of commodities for each rate group is virtually never based on scientific studies of consumer buying patterns, but simply on conventional views as to what constitutes a "luxury" and a "necessity." Even if it were possible to specify a structure of tax rates that would make a value-added tax less regressive, or even proportional, it is doubtful whether it would be good policy to adopt that rate structure. Whatever the desired degree of progressivity in the Federal tax system, it can be achieved through the structure of income tax rates, rather than by imposing high value-added tax rates on luxuries. The important equity objective in designing a value-added tax is to avoid the tax burden on the poor; some regressivity at higher income levels is a much less serious matter.

If a single rate of value-added tax is politically unacceptable, the only other rate should be zero. It should be applied to necessities such as food and medicine, assuming other alternatives for removing the burden of the tax from the poor are not feasible. If zero rates are used, there is little need for, and much complexity created by, the use of reduced "semi-necessity" and increased "luxury" rates of tax.

V. Foreign Transactions

In the Common Market countries, as explained in Chapters 2 and 3, exports and imports are taxed on the destination principle; goods traded internationally, that is, are taxed in the country of destination, or where they are consumed, rather than in the country of origin, or where they are produced. Thus, goods made in France and shipped to Germany are freed of tax under the French value-added tax since they are zero rated when exported, but they are subject to the German tax when imported. This procedure is followed because of the border tax adjustments that allow goods to be exported tax free and for the value-added tax to be imposed on imports.

With the credit method, the border tax adjustments to implement the destination principle are straight forward: exports are zero rated and imports are taxed. Since the tax credit at the final stage includes taxes paid at all earlier stages, the government can ensure that all goods sold abroad are shipped free of tax by simply zero rating exports. In the importing or destination country, the goods arrive tax free and are subject to tax at importation and on subsequent sales in that country. Because the destination principle is the

accepted international practice and because it allows imports and domestically-produced goods to compete on an equal tax basis, it would undoubtedly be followed by the United States.

As noted in Chapter 2, if the exporting country administers its value-added tax through the subtraction method, it is not possible to ensure that its exports will leave the country exactly tax free. Under the subtraction method, the value-added tax paid at each of the previous stages would be calculated and rebated. But if there is more than one rate of value-added tax, or if certain stages are exempt from the value-added tax, it is not possible to compute accurately the actual amount of value-added tax that should be rebated when goods leave the country. Similarly, it is impossible to know what tax to impose on imports to exactly equal tax paid under the subtraction method on comparable goods produced domestically. While in theory the subtraction method is simple, in reality multiple rates and exemptions make its operation very complex, if exports are to be completely free of tax and imports are not to be treated differently from domestic goods. Not only sales, but also purchases must be classified according to the various tax rates in order to calculate the value-added tax rebates to be given on exports and compensating taxes to be levied on imports.

The EEC countries hope ultimately to apply the tax on an origin basis on trade within the EEC. The objective is to avoid making border adjustments on intra-EEC trade, just as the United States would allow goods to cross from one state into another without adjusting for a Federal value-added tax. Under this approach, continuing the example above, French value-added tax would apply to the value added within France, and there would be no refund of French tax at export to Germany; Germany would apply its value-added tax to domestic sales, giving appropriate credit to the value-added tax paid to France to ensure the taxation of only the value added created within Germany. Thus, application of the German tax on imports from France to Germany would not be necessary. But much greater uniformity in value-added tax rates, coverage, and other features are necessary before this change to the origin principle can be implemented.